

Pre-AP: Interdisciplinary Strategies for English and Social Studies

2 days

Goals: This workshop will provide a structured format to:

1. Identify and foster in students the skills and attributes that will prepare them for AP courses and other challenging, college-level courses in English and Social Studies
2. Demonstrate specific teaching strategies that can be used to provide all students with appropriately challenging reading and writing tasks
3. Focus attention on the role of classroom environment in developing student thinking and communication skills
4. Develop alternate means of assessing student performance
5. Provide opportunities for teachers to work in teams to design curriculum that will promote higher-level learning

This workshop is divided into eight sections. In each section, you will be introduced to specific academic skills and corresponding teaching ideas. Time limitations of the workshop, however, will not allow for the extensive discussions and demonstrations that each topic merits. For this reason, you will be provided additional reading so that you can pursue topics of interest on your own.

Section 1. Ensuring that students are adequately prepared and motivated in the middle and early high school grades allows them access to advanced course work. Teachers need to be aware of the impact of school culture and expectations on students who typically enroll in AP and other challenging courses. In Section 1, you will identify the academic skills and dispositions of successful English and Social Studies students, and discuss methods for developing these attributes in your students.

Section 2. The focus of Section 2 is to demonstrate some of the strategies that encourage students to formulate questions and draw inferences from a variety of teaching materials. Student-generated questions and inferences are essential in the development of deep understanding. By engaging in activities in which you are asked to generate questions and develop inferences from those questions, you will see how some classroom approaches support deep understanding while others do not.

Section 3. Students need skills that enable them to read carefully and critically. Section 3 addresses some ideas for analyzing historical texts, documents, and literary pieces using the SOAPSTone (Speaker, Occasion, Audience, Purpose, Subject, Tone) format.

Section 4. In both English and Social Studies classrooms, students must learn to construct solid verbal and written arguments. Section 4 deals with identifying a thesis and supporting arguments in written material, developing an original thesis statement with supporting details, and recognizing fallacious reasoning.

Section 5. The instructional characteristics of classrooms with high student engagement, reliable questioning strategies, and effective discussion techniques are the focus of Section 5. This section will illustrate the importance of an environment safe for risk-taking in the development of the skills and characteristics already discussed.

Section 6. All important instructional goals should be assessed, and assessment should be suitable to the goal. The focus is on evaluating complex performance and setting standards: How good is good enough?

Section 7. Using the strategies discussed in this workshop, you will work individually or with a team of teachers to design a lesson or develop an idea for an interdisciplinary unit of study.

Section 8. What can we do to develop the student attributes we've discussed in this workshop in our own classrooms and schools? In Section 8, participants begin the process of planning for change that can enable them to create a culture of success.

Pre-AP: Strategies in Mathematics- Helping Students Learn Mathematics through Problem Solving
(Formerly Building Success in Mathematics)
2 days

Students who engage in active questioning, analysis, construction, and communication are shown to have deeper understanding of the concepts that they learn, in contrast to the traditional teaching model of memorization and repetition. Since most of today's mathematics teachers were taught traditionally, they often feel a weakness in developing learning through activities and problems. Most teachers have gone great lengths in evolving their classrooms, but still may not feel comfortable or effective.

This two-day workshop will provide strategies for designing and using meaningful investigations, writing dynamic problems, and enhancing current classroom activities, so that students will develop deeper understandings and produce more thoughtful responses. Teachers will examine how successful students learn and how to develop those skills in others, as well as relevant, informative assessment that will allow teachers to monitor and foster mathematical thinking without interrupting instruction.

General Themes

Designing multiple access problems
Mathematical literacy and communication
Mathematics as a process

The workshop conforms to:

The College Board's mission, particularly access and equity
NCTM Standards
Goals of Quantitative Literacy Project of ASA <http://www.amstat.org/education/k12material.html>

The workshop provides:

Substantial content background for teachers
Activities for students across grade levels
Activities meant to illustrate good pedagogy (various instructional approaches including cooperative learning)
Activities that require communication to support observations and conclusions
Opportunities for reflection
Connections between one activity and another

Pre-AP: Topics For AP Vertical Teams® In Mathematics
2 days

To succeed in efforts to give students a greater range of mathematics course opportunities, and to increase their awareness about these opportunities while they are still young, high school and middle school teachers must communicate and work with one another. An AP Vertical Team™ is a group of mathematics teachers of various grade levels, administrators, and counselors in a school district, working cooperatively to develop and implement a vertically aligned program in mathematics.

The one-day workshop focuses on articulating a middle and high school curriculum anchored in the skills, knowledge, and habits of mind needed for AP mathematics courses. Teachers concentrate on what and how they teach, as well as how they communicate and collaborate with each other. Participants become much more familiar with benefits and challenges of mathematics vertical teaming, and gain an arsenal of activities to use to generate discussion among their team members. Teachers engage in discussion and reflection pertaining to the group dynamics generated by the activities, as well as the implications for AP Vertical Teams, as they attempt to successfully implement these activities.

Unlike other workshops that focus on what students should know and be able to do, this workshop is very much centered on what teachers should know and be able to do.

General Themes

Become familiar with the College Board's mission to provide access and equity in its AP programs.
Become familiar with the standards of Advanced Placement and the role of Pre-AP in developing those standards.
Study some of the knowledge and skills necessary for students to be successful in AP Calculus and AP Statistics.
Practice strategies used by Mathematics Vertical Teams

The workshop conforms to:

The College Board's mission, particularly access and equity
NCTM Standards
AP Calculus and AP Statistics Topic Outlines
AP Vertical Teams approach

The workshop provides:

Content background for teachers that illustrates the vertical team concept
Activities for students across grade levels
Activities meant to illustrate good pedagogy (various instructional approaches including cooperative learning)
Explorations with discussion questions
Opportunities for reflection

Pre-AP: Strategies in Mathematics and Science- Analyzing and Describing Data

1 day

Data is a key component to all of the mathematics and science taught in school today: from the primary counting of objects to multivariable analyses, data forms the basis for most of the problem solving that students see.

This one-day workshop enriches the data analysis topics included in the middle and secondary grades by providing examples of activities where students collect data, use graphs and numerical summaries to get information from data, and communicate that information. Teachers assume the role of students as they discuss data collection and experimental design issues, work through exercises, and share observations and conclusions. Teachers collaborate and share ideas in the workshop just as students will do in class.

Five student-ready, multiple-day activities are given and modeled in the workshop: two dealing with univariate data and three with bivariate data. All build on topics that are already included in middle school and high school curricula and can be used as ancillaries to enrich and extend material that is routinely taught.

General Themes

Analysis of real data
Using summary statistics and graphs to investigate and gain information from data
Elementary principles of experimental design
Interpretation and communication of results

The workshop conforms to:

The College Board's mission, particularly access and equity
NCTM Standards
AP Statistics Topic Outline
AP Vertical Teams approach

Goals of Quantitative Literacy Project of ASA <http://www.amstat.org/education/k12material.html>
Benchmarks for Science Literacy 2061, released by the American Association for the Advancement of Science.

The workshop provides:

Substantial content background for teachers

Activities for students across grade levels

Activities meant to illustrate good pedagogy (various instructional approaches including cooperative learning)

Activities that require communication to support observations and conclusions

Activities that utilize technology

Opportunities for reflection

Connections between activities

Strategies in Science- Creating a Learner-Centered Classroom

2 days

This two-day workshop is designed to assist science teachers in creating a facilitative classroom that focuses on inquiry; encourages higher levels of thinking for all students; and orchestrates discourse through speaking, writing, and graphic representation. Specific strategies addressed include inquiry-based learning, discussion and discourse techniques, a five-stage instructional model, inductive thinking, discrepant events, brainstorming, assignment of roles in collaborative groups, and graphic organizers. The workshop provides strategies for designing and using meaningful investigations, writing dynamic problems, and enhancing current classroom activities so that students will develop a deeper understanding and produce more thoughtful responses. Teachers will gain a clear understanding of how successful students learn and how to develop those skills in others, as well as how to build relevant, informative assessments that allow teachers to monitor and foster scientific thinking without interrupting instruction. Workshop topics include engagement, exploration, explanation, elaboration, and evaluation.

Strategies in English-Rhetoric

1 day

This one-day workshop is designed to help teachers understand the classical art of rhetoric in its two senses: language as crafted for an audience; and the ability to find, evaluate, and use all of the available tools of language to achieve a purpose or an effect in a given situation. Participants will learn effective techniques by engaging in activities that will enable them to teach their students important rhetorical theory principles—such as the importance of the unstated assumption in both the creation and analysis of arguments, the nature of arrangement, and relation of style to form—that underlie the effectiveness of excellent writers and support the clear thinking and sound judgment of successful readers.

Topics for AP Vertical Teams in English

1 day

Through a series of hands-on activities and group discussions in this one-day workshop, participants learn how an AP Vertical Team in English can be centered around and driven by content, such as strategies for fiction and nonfiction. They will understand the benefits of a streamlined and connected curriculum for both teachers and students. An overview of the AP English Literature and AP English Language Exams will be provided. Topics addressed include literary analysis, analytic strategies for nonfiction, and team decision making.